

Work Order ID 115846

April-04-14 10:23:10 AM

115846

Page 1

Item ID: D3501-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Bushing

Stop

NS2

Start Date: 4/04/14 Start Qty: 200.00

200

Cust Item ID:

Required Date: 4/04/14 Req'd Qty: 200.00

200

Customer:

Reference:

Approvals: Process Plan: MLJDate: 4-04-09

Tooling:

Date:

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr								
----------	--------------	--	--	--	--	--	--	--	--

D3501	Rev A								
-------	-------	--	--	--	--	--	--	--	--

100

100

Hardinge

Hardinge CNC LATHE SMALL

0.00

2010111P
14/04/30

Hardinge CNC Lathe Small

Memo

0.00

110

110

QC

QC2- Inspect parts off machine FAI/FAIB

0.00

2010111P
14/04/29

Quality Control

Memo

0.00

120

120

QC

QC8- Inspect parts - second check

0.00

2010DAS
40
9-89

Quality Control

Memo

0.00

14/04/30

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____

Date: _____

Work Order update only

Work Order: _____
 Part No. _____
 NCR No. _____

DISPOSITION

Rework
 Scrap
 Use-as-is
 Suspected Unapproved

AGAINST DEPARTMENT/PROCESS

Skid-tube
 Machining
 Thermoforming
 Large Fab

Crosstube
 Small Fab
 Finishing
 Composite

Water Jet
 Prod. Eng. Coor.
 Rec/Store/Packaging
 Supplier

Engineering
 Quality
 Other

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General			
	Bending	Bend	Folio/Program	Outside Dimensions
	Centre Not Concentric	BOM/Route	Grain	Over/Under tolerance
	Cracks	Broken/Damage/Defect	Hardware	Part Incorrect
	Crimp/Kink/Ripple/Wave	Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing
	Cuffs	Contamination	Instructions Incomplete/Unclear	Part Moved
	Crushing	Countersink	Misaligned/off center	Positioned Wrong
	Heat Treat	Cut Too Short	Mislabeled	Power Loss/Surge
	Inspection Strip in Tube	Drawing	Misread	Pressure/Forced
	Marks/Chatter	Drill Holes	Off-set	Set-up
	Turning Sequence	Finish	Out of Calibration	Temperature/Cure
	Wave/Twist in Tube	Fit/Function	Out of Sequence	Weld
				Wrong Stock Pulled
				Other

Work Order ID 115846

April-04-14 10:23:10 AM

115846

Page 2

Item ID: D3501-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Bushing

Stop

NS2

Start Date: 4/04/14 Start Qty: 200.00

200

Cust Item ID:

Required Date: 4/04/14 Req'd Qty: 200.00

200

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Identify as per dwg & Stock Location: ST052 0.00***130***

Packaging

Packaging

Memo

0.00

201 14-5-01DAS
26
9-89

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Quality Control

Memo

0.00

MU9 14-05-0104-05-01

DQA: _____ Date: _____

Date: _____

The logo for DART Aerospace. It features the word "DART" in a bold, black, sans-serif font. The letter "D" is stylized with a small, thin wing-like shape extending from its top left. Below "DART", the word "AEROSPACE" is written in a smaller, all-caps, black, sans-serif font.

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Date: .

Work Order update only

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS						
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>					
Part No. _____			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>					
NCR No. _____			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>					
Suspected Unapproved <input type="checkbox"/>		Large Fab <input type="checkbox"/>		Composite <input type="checkbox"/>		Supplier <input type="checkbox"/>						
Root Cause		Date	Step	Qty	Description of work order update or non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector
Design <input type="checkbox"/>												
Doc/Data <input type="checkbox"/>												
Equip/Tooling <input type="checkbox"/>												
Handling/Pre <input type="checkbox"/>												
Material <input type="checkbox"/>												
Operator <input type="checkbox"/>												
Offset/Setup <input type="checkbox"/>												
Process <input type="checkbox"/>												
Supplier <input type="checkbox"/>												
Training <input type="checkbox"/>												
Transport <input type="checkbox"/>												
Unapproved <input type="checkbox"/>												
FAULT CATEGORY												
Landing Gear				General								
<input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function								
				<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence								
				<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge								
				<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled								
				<input type="checkbox"/> Other								

Picklist Print

April-04-14 10:23:10 AM

Page 1

Work Order ID: 115846

115846
D3501-1

Parent Item: D3501-1

Parent Item Name: Bushing

Start Date: 4/04/14

Required Date: 4/04/14

Start Qty: 200.00

Required Qty: 200.00

Comments: IPP Rev:A New Issue 06-05-09 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303R0.750		Purchased	No			100	f	52.6450	0.0791	16.65264			**

M303R0 750

303 Round Bar 0.750

Location	Loc Qty	Loc Code
MAT028	52.645	3,697 ✓
m127464	52.645	

14127647 → 12,614 ✓
14128882 → 0,833 ✓

14/04/14
14/04/30

DOA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____	DISPOSITION				AGAINST DEPARTMENT/PROCESS														
Part No. _____	Rework	Scrap	Use-as-is	Suspected Unapproved	Skid-tube	Machining	Thermoforming	Large Fab	Crosstube	Small Fab	Finishing	Composite	Water Jet	Prod. Eng. Coor.	Rec/Store/Packaging	Supplier	Engineering	Quality	Other
NCR No. _____																			

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General					
	Bending	Bend	Folio/Program	Outside Dimensions	Pressure/Forced	
	Centre Not Concentric	BOM/Route	Grain	Over/Under tolerance	Set-up	
	Cracks	Broken/Damage/Defect	Hardware	Part Incorrect	Temperature/Cure	
	Crimp/Kink/Ripple/Wave	Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld	
	Cuffs	Contamination	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled	
	Crushing	Countersink	Misaligned/off center	Positioned Wrong		
	Heat Treat	Cut Too Short	Mislabeled	Power Loss/Surge	Other	
	Inspection Strip in Tube	Drawing	Misread			
	Marks/Chatter	Drill Holes	Off-set			
	Turning Sequence	Finish	Out of Calibration			
	Wave/Twist in Tube	Fit/Function	Out of Sequence			

DART AEROSPACE LTD	Work Order:	115846
Description: Bushing	Part Number:	D3501-1
Inspection Dwg: D3501	Rev: A	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

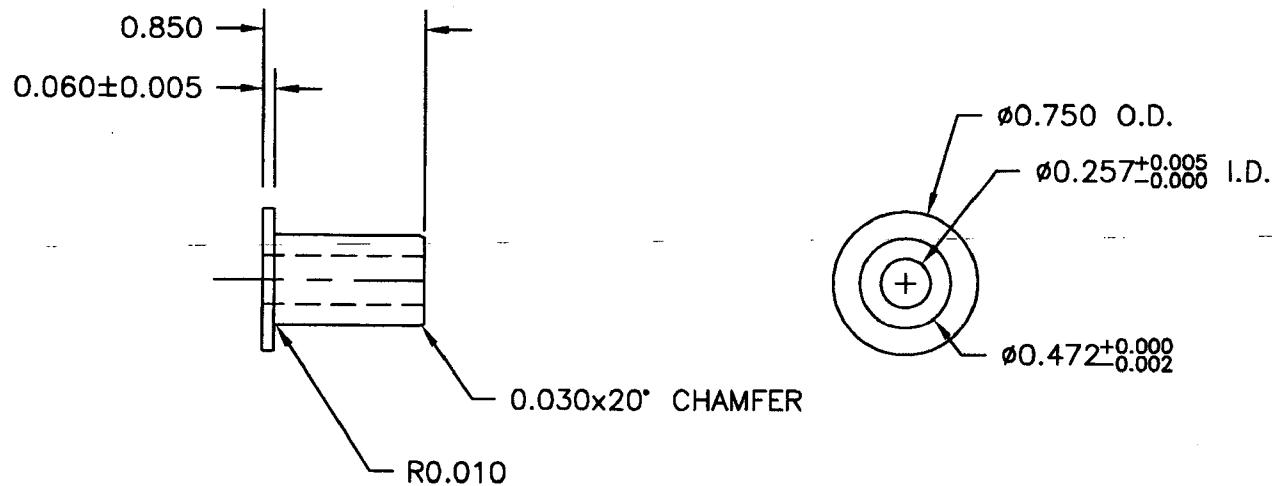
DAS

Measured by:	<i>WJP</i>	Audited by:	<i>40 9-89</i>	Prototype Approval:	N/A
Date:	<i>14/04/29</i>	Date:	<i>14/04/30</i>	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.10.27	New Issue	KJ/JLM <i>[Signature]</i>	<i>[Signature]</i>

DART

DESIGN	97	DRAWN BY	97	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	A	APPROVED	MM	DRAWING NO. D3501	REV. A SHEET 1 OF 1
DATE	06.04.18			TITLE BUSHING	SCALE 1:1
A	06.04.18			NEW ISSUE	

**D3501-1 BUSHING**

- 1) MATERIAL: AISI 303 SS (REF DART SPEC. M303R)
- 2) FINISH: NONE
- 3) BREAK ALL UNMACHINED SHARP CORNERS 0.010 MAX
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

RELEASED

06.08.15

1158410 MUL5
14-09-05

Copyright © 2006 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.